

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A semiconductor device which comprises a substrate and a semiconductor element mounted thereon through a bump bonding part, wherein

the semiconductor element has been encapsulated by coating a back and edges of the semiconductor element and a wire-less bump bonding part with a thermosetting sheet material having tackiness of 2-15 in terms of ball tack obtained by the ball rolling method provided for in JIS Z 0237,

wherein the back and edges of the semiconductor element and bump bonding part are completely sealed by the sheet material.

2. (currently amended): A process for producing a semiconductor device which comprises a substrate and a semiconductor element mounted thereon through a bump bonding part, which comprises encapsulating the semiconductor element by coating the back and the edges of the semiconductor element and a wire-less bump bonding part with a thermosetting sheet material having tackiness of 2-15 in terms of ball tack values obtained by the ball rolling method provided for in JIS Z 0237,

wherein the back and edges of the semiconductor element and bump bonding part are completely sealed by the sheet material.

3. (withdrawn): The process for producing a semiconductor device of claim 2, wherein the tackiness of the sheet material as measured at time of use is from 2 to 15 in terms of ball tack.

4. (withdrawn): The process for producing a semiconductor device of claim 2, which comprises covering the back of the semiconductor element with the sheet material having an area larger than the back of the semiconductor element, press-bonding the sheet material to thereby coat the back and the edges of the semiconductor element with the sheet material, and then thermally curing the sheet material to thereby encapsulate the semiconductor element.

5. (withdrawn): The process for producing a semiconductor device of claim 3, which comprises covering the back of the semiconductor element with the sheet material having an area larger than the back of the semiconductor element, press-bonding the sheet material to thereby coat the back and the edges of the semiconductor element with the sheet material, and then thermally curing the sheet material to thereby encapsulate the semiconductor element.

6. (previously presented): The semiconductor device of claim 1, wherein the thermosetting sheet material is a rubber-containing polycarbodiimide resin or rubber-modified polycarbodiimide resin.

7. (canceled).